Measure	Average	Unit	Description	Measure
Attic/Ceiling Insulation to R-49	(\$)		•	Life
Add R-49 (R-0 -> R-49)	2 14	per square foot	Ceiling blow, cellulose loose fill	45
Add R-38 (R-11 -> R-49)		per square foot	Ceiling blow, cellulose loose fill	45
Add R-30 (R-19 -> R-49)		per square foot	Ceiling blow, cellulose loose fill	45
Add R-19 (R-30 -> R-49)		per square foot	Ceiling blow, cellulose loose fill	45
Add R-11 (R-38 -> R-49)		per square foot	Ceiling blow, cellulose loose fill	45
Attic/Ceiling Insulation to R-38	0.32	per square root	certing blow, certains e 1003 e 1111	73
Add R-38 (R-0 -> R-38)	1 92	per square foot	Ceiling blow, cellulose loose fill	45
Add R-30 (R-8 -> R-38)		per square foot	Ceiling blow, cellulose loose fill	45
Add R-19 (R-19 -> R-38)		per square foot	Ceiling blow, cellulose loose fill	45
Add R-11 (R-27 -> R-38)		per square foot	Ceiling blow, cellulose loose fill	45
Sloped Ceiling Insulation	1.00	per square root	certing blow, certaiose roose iiii	45
2x4 cavity no insulation	1 /10	per square foot	Blown insulation, closed cavity	45
·				45
2x6 cavity no insulation Wall Insulation (2x4 cavity)	1.0	per square foot	Blown insulation, closed cavity	43
	2.2	nor causes foot	donce pack closed cavity	45
No insulation - fill w/R-13		per square foot	dense pack, closed cavity	
40% gaps and voids- fill w/R-13 Knee wall Insulation	2.2	per square foot	dense pack, closed cavity	45
	1.4	nan anuana faat	Ones estitu filosologo hatta	45
2x4 cavity Add R-11		per square foot	Open cavity, fiberglass batts	45
2x4 cavity Add R-13		per square foot	Open cavity, high density fiberglass batts	45
2x4 cavity Add R-15		per square foot	Open cavity, high density fiberglass batts	45
2x4 cavity Add R-21		per square foot	Open cavity, high density fiberglass batts	45
2x6 cavity Add R-19	1.57	per square foot	Open cavity, fiberglass batts	45
Duct Insulation	F CF		Fibouriose beatte	20
Add R-11		perlinear foot	Fiberglass batts	20
Add R-19	6.7	per linear foot	Fiberglass batts	20
Floor Insulation to R-30	2.44		One work file and an house	25
Add R-30 (R-0 -> R-30)		per square foot	Open cavity, fiberglass batts	25
Add R-19 (R-11 -> R-30)		per square foot	Open cavity, fiberglass batts	25
Add R-11 (R-19 -> R-30)	1.63	per square foot	Open cavity, fiberglass batts	25
Air Sealing	2.07	!	La usa basabada sasa	45
Duct Sealing	3.07	i e	In un-heated area	15
Priority Air Sealing		·	Obvious holes, crawl, garage, attic, walls	45
Mechanical Ventilation	708.1	each	Whole house/Local exhaust	45
Heating System Replacement				
Ductless Heat Pump – Single Head			Supplement permanently installed electric baseboard/wall heaters	20
90%+ Natural Gas Furnace	4,288.89	eacn	Replace low efficiency natural gas furnace	20
Other Measures	2.40	noulineauf	In un hooked areas (executed areas of the	42
Hot/Cold Water Pipe Insulation		per linear foot	In un-heated areas (crawl space, etc.)	13
Water Heater Insulation Wrap			In un-heated areas	13
Faucet Aerator		each	Direct install	15
Showerhead		each	Direct install	15
CFL Bulbs	8.76	each	Direct install Direct install	10 20

^{1.} Count is the number of agencies that submitted costs for a particular measure. A few measures were added to the analysis after we collected cost data from the agencies, so costs are taken from a few agencies that submitted additional costs. For these few measures, we believe the costs are reasonable for this analysis.

Measure	Avg. (\$)	Unit	Description	Measure
	748. (4)	O TINC	•	Life
Attic/Ceiling Insulation to R-19			Single-wide	25
Add R-19 (R-0 -> R-19)		per square foot	Ceiling blow, fiberglass	25
Add R-16 (R-3 -> R-19)		per square foot	Ceiling blow, fiberglass	25
Add R-12 (R-7 -> R-19)		per square foot	Ceiling blow, fiberglass	25
Add R-8 (R-11 -> R-19)	1.08	per square foot	Ceiling blow, fiberglass	25
Attic/Ceiling Insulation to R-31			Single-wide	
Add R-31 (R-0 -> R-31)		per square foot	Ceiling blow plus 2" rigid insulation	25
Add R-28 (R-3 -> R-31)		per square foot	Ceiling blow plus 2" rigid insulation	25
Add R-24 (R-7 -> R-31)	7.9	per square foot	Ceiling blow plus 2" rigid insulation	25
Add R-20 (R-11 -> R-31)	7.88	per square foot	Ceiling blow plus 2" rigid insulation	25
Attic/Ceiling Insulation to R-26			Double-wide	
Add R-26 (R-0 -> R-26)	1.64	per square foot	Ceiling blow, fiberglass	25
Add R-23 (R-3 -> R-26)	1.55	per square foot	Ceiling blow, fiberglass	25
Add R-19 (R-7 -> R-26)	1.42	per square foot	Ceiling blow, fiberglass	25
Add R-15 (R-11 -> R-26)	1.31	per square foot	Ceiling blow, fiberglass	25
Add R-10 (R-16 -> R-26)	1.2	per square foot	Ceiling blow, fiberglass	25
Attic/Ceiling Insulation to R-38			Double-wide	
Add R-38 (R-0 -> R-38)	2.03	per square foot	Ceiling blow, fiberglass	25
Add R-35 (R-3 -> R-38)	1.93	per square foot	Ceiling blow, fiberglass	25
Add R-31 (R-7 -> R-38)	1.76	per square foot	Ceiling blow, fiberglass	25
Add R-27 (R-11 -> R-38)	1.67	per square foot	Ceiling blow, fiberglass	25
Add R-22 (R-16 -> R-38)	1.52	per square foot	Ceiling blow, fiberglass	25
Wall Insulation				
2x4 cavity no insulation-fill	2.25	per square foot	dense pack, closed cavity	25
2x4 cavity 40% gaps and voids-fill	2.25	per square foot	dense pack, closed cavity	25
2x3 cavity no insulation-fill		per square foot	dense pack, closed cavity	25
2x3 cavity 40% gaps and voids-fill		per square foot	dense pack, closed cavity	25
Duct Insulation			, ,	
Add R-11	6.72	perlinearfoot	Fiberglass batts w/o floor insulation	15
Add R-19		perlinearfoot	Fiberglass batts w/o floor insulation	15
Floor Insulation to R-19			, , , , , , , , , , , , , , , , , , , ,	
Add R-19 (R-0 -> R-19)	2.18	per square foot	Dense pack belly	25
Add R-12 (R-7 -> R-19)		per square foot	Dense pack belly	25
Add R-8 (R-11 -> R-19)		per square foot	Dense pack belly	25
Floor Insulation to R-30	1.47	per square root	Dense pack berry	23
Add R-30 (R-0 -> R-30)	2.7	per square foot	Dense pack belly	25
Add R-23 (R-7 -> R-30)		per square foot	Dense pack belly	25
Add R-19 (R-11 -> R-30)		per square foot		25
Add R-11 (R-19 -> R-30)		per square foot	Dense pack belly Dense pack belly	25
Air Sealing	1.04	per square root	Delise pack belly	23
-	2.56	nor linear foot	In un heated area	15
Duct Sealing	3.30	perlinearfoot	In un-heated area	13
Priority Air Sealing	115.38	per 100CFM50 reduction	Obvious holes, crawl, garage, attic, walls	25
Mechanical Ventilation	730.01	each	Whole house/Local exhaust	25
Heating System Replacement				
90%+ Natural Gas Furnace	4,244	each	Replace low efficiency gas furnace	15
Other Measures				
Hot/Cold Water Pipe Insulation	3.83	perlinearfoot	In un-heated areas (crawl space)	13
Water Heater Insulation Wrap	141.32	each	In un-heated areas	13
Faucet Aerator	11.35		Direct install	15
Showerhead	21.15		Direct install	15
CFL Bulbs		each	Direct install	10
C. 2 B0183	0.70		' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	20

Note: Count is the number of agencies that submitted costs for a particular measure. Some measures are not installed by many agencies. Some measures were added to the analysis after cost data was collected from the agencies. In a few cases, costs are taken from a few agencies that submitted additional costs. For these few measures, we believe the costs are reasonable for this analysis.